



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,810	06/24/2003	Byeong-Chang Lee	1572.1140	9850
21171	7590	09/20/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			GRIER, LAURA A	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/601,810	LEE ET AL.	
	Examiner	Art Unit	
	Laura A Grier	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-22 is/are allowed.
- 6) ☒ Claim(s) 23, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1: ☐ Certified copies of the priority documents have been received.
- 2: ☐ Certified copies of the priority documents have been received in Application No. ____.
- 3: ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 23 and 25-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al., U. S. Patent No. 6148243 in view of Smith et al., U. S. Patent No. 5847922.

Regarding **claim 23**, Ishii et al. (herein, Ishii) discloses a sound processing method and system (figures 1 and 3). Ishii's disclosure comprises a personal (1) computer with an audio circuit (7) – col. 3, lines 4-5, 13-14, 21-28; which reads on a main sound audio system; a docking station (14) coupled thereto – col. 3, line 29, which reads on an auxiliary audio system, a network (311), which inherently constitutes as a plurality of filters as evident of the fact that the network divides the signals into low frequency and mid/high frequency signals and the fact the network is composed of coils and capacitors - col. 5, lines 57 – col. 6, lines 1-58; the system comprises switches (309/310) coupled to a controller (302) which are disable to allow the audio circuit to output audio to the network to provided a filtered signal to the main audio unit and the

auxiliary audio system, wherein it is determined that the docking station is in communication with the PC via the docking sensor (307), col. 5, lines 57 – col. 6, lines 1-58 , which reads on a switch controlling. However, Ishii fails to specifically disclose the docking station (auxiliary audio system) comprising filters.

Regarding the docking station having filters, in a similar field of endeavor, Smith et al., (herein, Smith) discloses a portable computer docking station having improved speaker apparatus therein. Smith's disclosure comprises a docking station including speakers coupled to equalizing circuits, wherein the speakers are operative at mid-to-high frequencies, wherein the function of the equalizing circuit is synonymous to the performance of a filter.

Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Ishii by implementing filters in a docking station for the purpose of providing an improved sound output quality level in a docking station and reducing fabrication cost of a docking station with sound capability.

Regarding **claim 25**, Ishii and Smith discloses everything claimed as applied above (see claim 23). Ishii discloses the docking station (auxiliary audio system) docketed to the personal computer, which reads the auxiliary audio system provided in the docking station, therein.

Regarding **claim 26**, Ishii discloses a sound processing method and system (figures 1 and 3). Ishii's disclosure comprises a docking sensor(303) coupled to the personal computer(1) with an audio circuit, which read on a sensor and a main audio unit, a docking station (14) coupled thereto – col. 3, line 29, which reads on an auxiliary audio system, a controller (302) coupled thereto; which reads on a controller; a network (311), which inherently constitutes as a plurality

Art Unit: 2644

of filters as evident of the fact that the network divides the signals into low frequency and mid/high frequency signals and the fact the network is composed of coils and capacitors - col. 5, lines 57 - col. 6, lines 1-58. However, Ishii fails to specifically disclose the docking station (auxiliary audio system) comprising filters.

Regarding the docking station having filters, in a similar field of endeavor, Smith et al., (herein, Smith) discloses a portable computer docking station having improved speaker apparatus therein. Smith's disclosure comprises a docking station including speakers coupled to equalizing circuits, wherein the speakers are operative at mid-to-high frequencies, wherein the function of the equalizing circuit is synonymous to the performance of a filter.

Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Ishii by implementing filters in a docking station for the purpose of providing an improved sound output quality level in a docking station and reducing fabrication cost of a docking station with sound capability.

Allowable Subject Matter

4. Claims 1-22 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 1 and 11, the prior art of record is drawn to a personal computer system comprising a docking station, wherein the PC includes a network (filters), and switches. However, the prior art fails to disclose or fairly suggest a 1st, 2nd, and 3rd filter, and switching unit, therein as of the claimed invention.

Art Unit: 2644

Claim 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


Laura A. Grier
September 14, 2004